

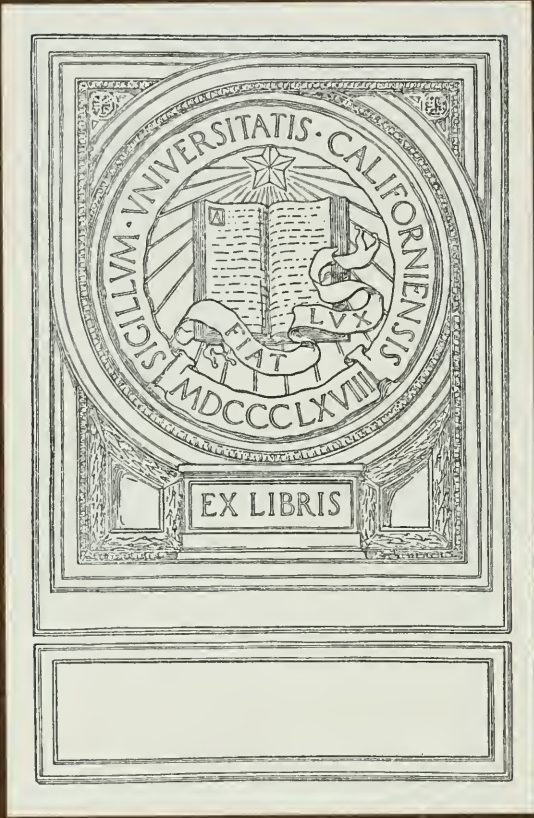
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BUREAU OF APPLIED ECONOMICS, Inc.
WASHINGTON, D. C.

Standards of Living

A Compilation of Budgetary Studies

WASHINGTON
1919.

BUREAU OF APPLIED ECONOMICS, Inc.
WASHINGTON, D. C.

HUGH S. HANNA, *Director*
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PREFACE

The great present interest in the subject of a "living wage" makes it seem pertinent at this time to bring together the results of the various studies of standards of living in this country. The present volume seeks to present, either in full or in summary form, such of these studies as seem of particular value.

I—MINIMUM SUBSISTENCE AND MINIMUM COMFORT BUDGETS.

Prepared by PROF. W. F. OGBURN.

The Principles of the National War Labor Board provided that every workman should have wages which would insure a reasonable standard of comfort. In the course of the decision of this standard, Professor W. F. Ogburn, who was in charge of the Cost of Living Section of the Board, submitted the results of several independent investigations made by his staff. Practically the same data were submitted by him as an expert witness in the arbitration proceedings of December, 1918, before Judge Samuel Alschuler, Administrator of Industrial Relations in the Chicago Slaughtering and Meat Packing establishments, and also in the proceedings before a section of the National War Labor Board which in January, 1919, had under consideration wages and working conditions among the boatmen in New York Harbor. Prof. Ogburn's budgets with accompanying comments were as follows:

1. There are various budget levels. Three budget levels have been distinguished:

(a) *The pauper or poverty level.*—A good many budgets written in books have been worked by charity organization society workers, and their estimates are sometimes at a pauper level somewhat below the subsistence level. The test is usually at a point where the families receive aid from some charity organization or other source, or perhaps where they run into a deficit. It is, of course, a fact that a good many American families have been living at this level below that of subsistence.

(b) *The minimum of subsistence level.*—This level is based essentially on physical well-being with little attention paid to the social scale. It may vary from time to time, and certainly does from country to country, and possibly from immigrant group to immigrant group.

(c) *The minimum comfort level.*—Very little attention has been paid to this level in budget literature, but the standard is as much a reality as is that of any other budget. It is one level above that of the subsistence level, and provides slightly more for comforts, insurance, clothing, and sundries, and is supposed to furnish a certain well-being above that of the physical level.

2. Budget items must be an average. For instance, 52 monthly car rides may be a minimum for a man who lives far away from work. No car rides may be a minimum for a man living near work and near

town. Forty car rides may never be the actual number taken by any men, but will be an average for a distribution of men, some of whom live near work and some far away.

3. Budget estimates can not be set at the lowest individual consumption estimate in a distribution. The calory requirement per man per day can not be set at 2,500, because one man happens to require that many, when the average man requires approximately 3,500.

4. Budget estimates are not an ideal budget. We can not go on the assumption that the housewife can purchase food values with the skill of a domestic-science expert, or that she has the will power of a Puritan, or that no allowance would be made to the man for drinks and tobacco.

5. Budget standards may not necessarily be actual budgets. For instance, the actual budget may show an actual expenditure of \$18 a year for health, yet we may have evidence to know from the number of days' sickness of the American workman that \$18 is not enough. The items should be placed at a higher figure than is actually found. However, budget estimates should bear a very close relationship to actual budgets.

MINIMUM BUDGET PROPOSED.

The following minimum budget of \$1,386 is suggested for consideration:

Tentative Budget American Subsistence Level, 1918.

Food	\$615
Clothing:	
Man	76
Woman	55
11 to 14 years.....	40
7 to 10 years.....	33
4 to 6 years.....	30
Rent	180
Fuel and light.....	62
Insurance	40
Organizations	12
Religion	7
Street-car fare	40
Paper, books, etc.....	9
Amusements, drinks, and tobacco.....	50
Sickness	60
Dentist, oculist, glasses, etc.....	3
Furnishings	35
Laundry	4
Cleaning supplies	15
Miscellaneous	20
Total.....	<u>\$1,386</u>

This budget is for a large eastern city and is the result of studies of 600 actual budgets of shipyard workers in the New York shipbuilding district.

PROF. CHAPIN'S BUDGET BROUGHT UP TO DATE.

Another way of estimating a minimum budget for the American subsistence level in 1918 is to take minimum budgets of past years that have been accepted as standard and apply the increases from the date of the budget to the present time in the prices of the various items of the budget, thus bringing them up to date. This method assumes no change in minimum standards. It is of course subject to possible inaccuracies in measuring the rising cost of living between specific dates for specific places. This inaccuracy is thought to be slight however.

For instance, one of the most famous and perhaps most generally accepted budget estimates is that of Prof. Chapin, who made a study lasting several years of New York families, publishing his result in 1907. He said, "An income under \$800 is not enough to permit the maintenance of a normal standard. An income of \$900 or over probably permits the maintenance of a normal standard at least as far as the physical man is concerned." If we take the increase in the cost of living from 1907 to June, 1918, to be 55 per cent, then Chapin's \$900 becomes \$1,395. If we take the increase to be 60 per cent then Chapin's \$900 becomes \$1,440.

Probably the best estimates of increasing cost of living place the increase from January 1, 1915, to June 1, 1918, as 55 per cent.

MINIMUM BUDGET OF NEW YORK FACTORY COMMISSION BROUGHT UP TO DATE.

In 1915 the New York State Factory Investigation Commission set a minimum budget for 1914 in New York City at the figure \$876. Applying increases in items of the budget by classes from January 1, 1915, to June 1, 1918, we get, as seen from the following table, a budget of \$1,356.

	Budget New York Factory Commis- sion 1914.	Increases in cost of living to June 1, 1918.	New York Factory Budget brought up to date.
		<i>Per cent.</i>	
Food.....	\$325	65	\$536
Rent.....	200	29	258
Fuel and light.....	20	44	28
Clothing.....	140	76	246
Sundries.....	191	51	288
	876	.....	1,356

It is possible to criticize this budget in the first instance as being low in food and certain sundries for an average of a group of families.

**MINIMUM BUDGET OF THE NEW YORK FACTORY INVESTIGATING
COMMISSION, 1915.**

Estimate of Cost of Living of normal Family of Five in New York City.

Food	\$325.00
Rent	200.00
Fuel and light.....	20.00
Clothing	140.00
Car fare	31.20
Insurance:	
Man	20.00
Family	15.60
Health	22.00
Furnishings	7.00
Education, newspaper	5.63
Recreation and amusement.....	50.00
Miscellaneous	40.00
	<hr/>
Total.....	\$876.43

**MINIMUM BUDGET OF NEW YORK BOARD OF ESTIMATE BROUGHT
UP TO DATE.**

In February, 1915, the Bureau of Personal Service of the Board of Estimate and Apportionment of New York City made a minimum budget estimate for an unskilled laborer's family in New York City of \$845. Applying increases in items of the budget by classes from January 1, 1915, to June 1, 1918, we get, as seen from the following table, a budget of \$1,317.

	Budget New York board of estimate, 1915.	Increases in cost of living to June 1, 1918.	New York board of estimate budget brought up to date.
		<i>Per cent.</i>	
Food.....	\$381	65	\$634
Rent.....	168	29	217
Fuel and light.....	43	44	62
Clothing.....	104	76	183
Sundries.....	146	51	221
		<hr/>	
Total.....	\$845	M	1,317

It is possible to criticize this budget as being too low in allowances for health, furniture, and education, and very low indeed in other sundries.

Budget of New York Board of Estimate for 1915.

Housing	\$168.00
Car fare	30.30
Food	383.81
Clothing	104.20
Fuel and light.....	42.75
Health	20.00
Insurance	22.88
Papers and other reading matter.....	5.00
Recreation	40.00
Furniture, utensils, fixtures, moving expenses, etc.....	18.00
Church dues	5.00
Incidentals—soap, washing material, stamps, etc.....	5.00
	<hr/>
Total.....	\$844.94

ESTIMATING THE BUDGET FROM FOOD EXPENDITURE.

Another method of estimating a budget is by taking the food item at a certain figure, and as we know a good deal about the percentage which food is of the total budget, we can estimate the total budget.

The reason for taking food is that food does not vary greatly, and then we can measure with greater accuracy the necessary food for a family than most of the other general items, such as rent, clothing, sundries, etc.

It is generally accepted that a man at moderate physical labor needs 3,500 calories a day and Atwater has estimated the needs of the individual members of his family in per cents of his needs. Thus his wife consumes 0.8 as much; a boy of 16 years of age, 0.9 as much; a girl 15 to 16, 0.8, a child from 6 to 9 years, 0.5; and so on. We thus express a family in terms of adult males. We say that a family of five—man, wife, and three children—will equal 3.3 adult males when the children are of a certain age.

The average food budget of 600 families of shipyard workers in the New York district collected by the Bureau of Labor Statistics was found to cost \$607 for 3.6 equivalent adult males. This was submitted to calory analysis and yielded 3,155 calories of energy for man per day, not including any waste. This means that \$607 did not furnish enough food for the New York families. A food expert might have bought the necessary amount, but the families in actual practice did not.

Dietaries should be well balanced also, but this analysis was not undertaken. So the important conclusion results that in the New York shipbuilding area \$607 is not enough of an allowance for food.

Now, from Prof. Chapin's excellent study we have seen that at the point where the families cease to be undernourished, food is 44 per cent of the total budget. Now, if we take a low figure of \$615 as the food allowance for family of 3.3 or 3.4 equivalent adult males and place it at 44 per cent of the budget, we get a minimum budget of \$1.396.

SUMMARY OF ESTIMATES ON MINIMUM BUDGETS FOR AMERICAN SUBSISTENCE LEVEL.

From three angles we have formed an estimate of a minimum budget: (1) From study of actual budgets, (2) from applying increased costs of living to recognized standard budgets, (3) from estimates of adequate food allowance and its percentage of expenditures.

These estimates for New York district in 1918 are as follows:

1. Detailed budget from family studies.....	\$1,386
2. Chapin's budget brought to date.....	1,395
New York factory budget brought to date.....	1,356
Board of Estimate budget brought to date.....	1,317
3. From food allowance.....	1,396

MINIMUM COMFORT BUDGETS, LEVEL ABOVE SUBSISTENCE.

Many American industrial workers fortunately do not live on the minimum of subsistence level; they live above the minimum level. This second level is, of course, a reality. An estimate approximating this level was made by the Faculty of Economics and Sociology of the University of Washington in the fall of 1917 for street-car men, which was used as the basis of settling the wage controversy at that time. The figure was set at \$1,500 a year for a family of five, as a result of some four weeks' study of actual budgets of skilled workers. This complete budget is cited in full in this report. The cost of living has risen in Seattle since that time about 15 per cent as judged by the studies of the University of Washington and the Board of Labor Statistics. This would bring the budget of \$1,500 up to \$1,725, if we take 15 per cent as the increased cost of living. Dr. Jessica Piexotto, of the University of California, set a budget of \$1,476 for Pacific coast workers, which she called a minimum standard of wholesome living, and not mere subsistence. This budget was for October, 1917, and would probably amount to over \$1,700 at the present time. As further evidence bearing on the budgets for a level above that of minimum subsistence a budget is submitted in detail and follows these paragraphs. This budget is based largely upon a study of the workers in the shipyards in the New York district, who receive the higher incomes.

PROPOSED BUDGET OF LEVEL ABOVE MINIMUM SUBSISTENCE.

Average for the United States.

Food	\$625.00
Clothing	313.50
Rent, fuel and light.....	295.00
Sundries	527.00
Total.....	<u>\$1,760.50</u>

General Summary.

Food	\$625.00
Clothing:	
Man	92.50
Woman	87.00
Boy, 13 years.....	57.00
Girl, 8 to 10 years.....	37.50
Boy, 4 to 7 years.....	39.50
Rent	220.00
Fuel and light.....	75.00
Insurance and savings.....	150.00
Health	60.00
Furnishings	50.00
Education	20.00
Car fare	55.00
Organizations (church, labor, and others).....	24.00
Comforts (tobacco, candy, gifts, etc.).....	43.00
Recreation	59.00
Miscellaneous (cleaning, stamps, barber, etc.).....	75.00
Total.....	<u>\$1,760.50</u>

Food.

600 pounds meat, fish and cheese.....	\$175.00
730 quarts of milk.....	96.00
80 dozen eggs.....	34.00
8 pounds beans.....	14.00
360 pounds flour.....	24.00
360 pounds cornmeal.....	26.00
200 pounds cereals.....	20.00
48 pounds macaroni.....	5.00
50 pounds rice.....	6.00
600 pounds potatoes.....	13.00
600 pounds vegetables.....	36.00
600 pounds fruits.....	30.00
120 pounds butter.....	60.00
75 pounds lard, oils, and fats.....	25.00
250 pounds sugar.....	23.00
40 pounds coffee.....	12.00
12 pounds tea.....	6.00
Sundries	20.00
Total.....	<u>\$625.00</u>

STANDARDS OF LIVING.

Man.

Overcoat	\$6.50
Sweater	2.50
Suit or uniform.....	25.00
Trousers	8.00
Shoes and repair.....	15.00
Overshoes	1.50
Underwear	6.50
Night garments	2.00
Hats	4.00
Shirts	6.50
Socks	4.50
Gloves	6.00
Ties, collars, and handkerchiefs.....	2.00
Suspenders and garters.....	1.00
Incidentals	1.50
Total.....	<hr/> \$92.50

 **Woman.**

Top coat	\$8.00
Suits	12.50
Shoes and repair.....	12.00
Overshoes .....	.75
Underwear	5.00
Nightgowns	3.00
Underskirt	2.50
Corsets	4.00
Kimona .....	.50
Waists	5.00
House dresses	5.00
Street dress	7.50
Hats	9.00
Gloves	2.50
Stockings	2.00
Aprons	2.25
Umbrella	1.00
Incidentals (veils, pins, brushes, handkerchiefs, furs, slippers, etc.)	4.50
Total.....	<hr/> \$87.00

Boy 13 and Over.

Top coat and sweater.....	\$7.50
Suit and trousers.....	17.00
Shoes and repair.....	16.00
Underwear	4.00
Night garments	1.50
Hats	3.50
Shirts	3.50
Stockings and socks.....	2.50
Ties, handkerchiefs, etc.....	1.50
Total.....	<hr/> \$57.00

Girl 8 to 10.

Top coat and sweater.....	\$6.00
Rubbers	1.50
Shoes and repair.....	15.00
Underwaists and garters.....	1.50
Dresses (school and best).....	6.00
Petticoat (or bloomers).....	1.50
Underclothes	
Night garments	
Hats	2.00
Stockings	2.00
Ribbons and handkerchiefs.....	1.00
Umbrella	1.00
Total.....	<hr/> \$37.50

Boy 4 to 7.

Top coat and sweater.....	\$4.50
Shoes and repair.....	15.00
Rubbers	1.50
Suits (work, best, overalls).....	9.00
Underwear	
Underwaists and garters.....	1.50
Night garments	
Hats and caps.....	1.00
Waists and blouses.....	2.50
Mittens, ties, handkerchiefs.....	1.00
Stockings	3.00
Total.....	<hr/> \$39.50

Rent, Water, Fuel, and Light.

House, 5 or 6 rooms, with water.....	\$220.00
Coal, wood, gas, and light.....	75.00
Total.....	<hr/> \$295.00

Sundries.

Insurance and savings.....	\$150.00
Organizations (labor and other).....	15.00
Education (newspaper, magazines, and books).....	20.00
Church	9.00
Health (physicians, drugs, dentist).....	60.00
Furnishings	50.00
Car fare	55.00
Cleaning and laundry.....	25.00
Tobacco	15.00
Gifts (Christmas, etc.).....	8.00
Candy	5.00
Drinks	15.00
Amusements and vacations, etc.....	50.00
Stamps, barber, stationery, etc.....	15.00
Exigencies and waste.....	35.00
Total.....	<hr/> \$527.00

II—HIGHER FOOD PRICES AND THE PROPER NUTRITION OF WORKINGMEN'S FAMILIES.

(Report of Professor Jaffa, of the University of California.)

During September, 1917, an Arbitration Board which had been appointed to adjust the wages of employes of the street railways of Oakland, California, requested Professor M. E. Jaffa, of the College of Agriculture, University of California, to submit for their information a report regarding the increase in cost of food during the preceding ten years. As several other members of the faculty of the University had been asked for similar reports, Professor Jaffa decided to leave the matter of the total family income to be discussed by the economists and to emphasize in his report the purely nutritional side of the problem. He arranged a table showing the approximate amounts of the different staple foods which form the diet of the average family. He then calculated the cost of this diet for the preceding ten years, and made his results the basis of an analysis of the increased cost of living and of the effect of rising prices upon the physical well-being of the worker and his family.

"Food is no longer," he states, "considered as a mere appeaser of the appetite. It is now recognized, in the serious aspect, as a satisfier of the physiological needs of the body. These fundamental food needs do not vary with the income, but depend upon such things as growth, weight, and amount of work performed. It takes just as much milk to nourish the body of one baby as it does another, regardless of the father's earning capacity. A man engaged in heavy labor requires more food than does an office man, regardless of the difference in income. But the *diet* is a different matter. One man may eat rib roast, while another eats stew—but meat they both require. One may eat hot-house berries while the other eats dried apples—but fruit they both should have. In other words, a proper diet for any family should be drawn in right proportion and in adequate amounts from *all five food classes*, but for the family of small income the selection must be made, in large part, from the cheaper foods or grades of food in each class, and the quantity is usually found to be nearer to a minimum than can be considered desirable.

"The following table shows the effect of increased prices on the total food cost for a family of small income. It expresses the average of many dietary studies of such families and has been modified just enough to overcome undesirable deficiencies due to enforced privations, and to meet the *minimum* demands for health and efficiency.

"It can not be sufficiently emphasized that while this type of diet has been selected as a working basis, it is *not* therefore to be considered a sufficient or an approved diet. Only a certain proportion of people can maintain health on a minimum—which provides only that amount of energy which the body actually puts forth in the processes of living and working. It provides no safety factor, and allows for no individual differences. No person should be held down to a minimum when the appetite and apparent bodily needs seem to call for more. A minimum expresses the line below which it is dangerous to go. All the food which this diet calls for is *necessary*, but not *necessarily all*, that is required.

TABLE SHOWING INCREASE IN COST OF FOOD FROM
MAY, 1907, TO MAY, 1917.

Minimum Diet on Which Health Can Be Maintained for a Workingman, His Wife and Three Children Between 4 and 14 Years of Age.

Food materials.	Food and cost for one month.				
	Pounds.	1907.	1912.	1916.	1917.
Class I—					
Meat and fish.....	50	\$5.75	\$7.25	\$8.00	\$10.00
Milk.....	120	4.80	4.80	4.80	6.00
Eggs.....	6	.81	1.12	1.08	1.56
Beans.....	8	.40	.40	.40	1.60
Class II—					
Flour.....	60	1.88	1.92	1.92	4.80
Cereals.....	17	.49	.77	1.02	1.36
Macaroni.....	4	.28	.32	.32	.50
Rice.....	10	.60	.60	.60	.83
Class III—					
Potatoes.....	35	.70	1.05	1.05	2.17
Vegetables.....	55	1.38	1.65	1.65	1.65
Fruits.....	50	2.25	2.50	2.50	2.50
Class IV—					
Butter.....	8	2.29	2.55	2.40	3.60
Oils and fats.....	10	1.35	1.90	2.00	2.50
Class V—					
Sugar.....	25	1.38	1.53	1.75	2.25
Extras—					
Coffee and tea.....	2	.73	1.00	1.00	1.00
Sundries.....		2.00	2.30	2.50	3.00
Total, per month.....		\$27.09	\$29.66	\$32.99	\$45.32

Sundries include yeast, corn starch, cocoa, cheese, syrup, salt, etc.

"A study of this table shows that the cost of food for the family diet here presented has gone up, in ten years, from \$27.00 to \$45.00—an increase of upwards of 67 per cent. Staggering as these figures are when considered in connection with a stationary income, the increase shown in the last year is by far most serious. It is quite evident that the increased cost of nearly \$18.23 shown in the table could not have been met by many families under discussion. It will be necessary, then,

to consider what adjustments have been made, and the effect of these adjustments upon the health of the family.

"Much has been accomplished by many people by substituting one food for another as prices have changed. Some of this has been legitimate and helpful—some has been unwise and detrimental.

"The extent to which substitution can be practiced depends almost entirely upon the type of the original diet, and this, in turn, depends upon the income. Not only is the total supply of food more generous on the large income, representing the maximum for health rather than the minimum, but the distribution of foods in the various classes is different. On a low income, people can afford only a small quantity of the concentrated foods, meat, eggs, butter, and sugar, the largest proportion of their diet coming from the starchy foods which are "bulky," and furnish the cheapest form of nourishment for the money expended. As the income goes up and people are free to exercise their instinctive choice, the use of meat, eggs, butter, sugar, etc., increases, and the starchy foods are decreased and replaced in part by the other class of bulky foods—fruits and vegetables, which are more expensive for the nourishment they contain, and are, therefore, not used freely by poorer people. We have, then, two very different types of diet to consider. Let us see what happens to each when prices rise.

MEAT.

"When *meat* increases in price, the well-to-do, who have usually bought a large proportion of choice cuts, can substitute inferior ones on some days, use beans occasionally, or reduce their meat quantity somewhat. Where *cheap meats*, however, have been the rule, and where beans have *always* been used for economy, there is no recourse but to pay the price or go without. And when, at the same time, beans jump nearly three-hundred per cent, the detrimental form of substitution begins, and starchy foods and inadequate amounts of milk or cheese are substituted for protein. One food can not be used with safety to replace another *unless it is in the same class*, as each of the five classes have important and different uses in the body.

POTATOES.

"Again, when potatoes increase in price, most people used rice or macaroni as a substitute, although potato is a *vegetable* and *not* a cereal food. Here again the well-to-do suffered no harm. Their supply of other vegetables, as well as fruit, was enough for their physiological needs. But the people on a minimum diet have always depended upon potatoes very largely to furnish that *fresh quality*, and those special

minerals, so important to health. They have never afforded much other vegetable, nor do these others furnish the amount of, nourishment in addition to the hygienic values, that potatoes do. Therefore, people of small income suffered in health. That this form of substitution was detrimental was shown in several institutions where this form of economy caused a decided increase in the drug bills.

SUGAR.

"There is no cheap substitute for sugar, and when this food became expensive, the quantity was reduced and nothing was substituted.

As the maximum and medium diets provide good amounts of all forms of concentrated foods, a moderate reduction in quantity of one kind, or several, can be made without injury to health. But where the diet is already low, the loss of nourishment is keenly felt, and when all other forms of concentrated foods are also expensive, no adequate substitution *can be made.*

"The scheme works like this:

Cereal food forms the cheapest and largest part of the diet. The price rises, and the pocket book is strained.

Meat and beans increase in price, and people are told to eat more cereals. Result: more bulky food, unbalanced diet, less nourishment, but more expense.

Butter increases in price. The supply is *cut down.* People are told that other foods can provide the nourishment. Result: more bulk, less balance, and less nourishment.

Sugar increases in price. Amount is cut down and *nothing* is substituted.

Milk increases in price. Amount is cut down and *nothing* is substituted. Result: more loss of protein and of fat.

Cereals rise again. There is no cheaper food, and *nothing can be substituted.*

"Where the income is small this process soon drains the diet of those foods which are most essential to health, and forces it down below the danger line."

After pointing out many popular misconceptions as to the increased cost of living, Professor Jaffa concludes with an unusually strong point: "A great many persons," he states, "tend to ignore a small percentage of advance in price of a particular foodstuff which as a matter of fact may be very serious because of the importance of the food or the fre-

quent use of it, while, on the other hand, great stress is often laid on a spectacular rise in price of a food which may be used only occasionally and, as a consequence, adds little to the total food cost of a family."

INCREASED LIVING COSTS, 1916-1917.

An employer of labor requested the University of California Agricultural Experiment Station for an estimate of the increased cost of living which he might use as a basis for adjustment of wages with his employes. Accordingly, Professor M. E. Jaffa, to another branch of whose work reference has just been made, prepared a statement (which has been printed as a bulletin of the Agricultural Experiment Station) showing for an average family the increase in the cost of living from May, 1916, to May, 1917.

"It is impossible," Professor Jaffa states, "to estimate the expenses of any family without knowing all the conditions, but there are certain fixed items of expense, and the percentage of increase in cost is known for others. These form a good basis for calculation in regard to the effect of high prices on the mode of living of a family of small income and will be discussed in turn. The accompanying table shows how the varying prices of foodstuffs affect the total food cost."

TABLE SHOWING INCREASE IN COST OF FOOD FROM
MAY, 1916, TO MAY, 1917.

Minimum Diet on Which Health Can Be Maintained for a Workingman, His Wife and
Three Children Between 4 and 14 Years of Age.

	Food and Cost for 1 Month			Market Price per Pound.	
	Pounds.	1916	1917	May 1916	May 1917
Meat and fish.....	50	\$8.00	\$10.00	\$0.16	\$0.20
Milk.....	120	4.80	6.00	.04	.05
Eggs.....	6	1.08	1.56	.18	.26
Beans.....	8	.40	1.60	.05	.20
Flour.....	60	1.92	4.80	.032	.08
Cereals.....	17	1.02	1.36	.06	.08
Macaroni.....	4	.32	.50	.08	.125
Rice.....	10	.60	.83	.06	.083
Potatoes.....	35	1.05	2.17	.03	.062
Vegetables.....	55	1.65	1.65	.03	.03
Fruits.....	50	2.50	2.50	.05	.05
Butter.....	8	2.40	3.60	.30	.45
Oil and fats.....	10	2.00	2.50	.20	.25
Sugar.....	25	1.75	2.25	.07	.09
Coffee and tea.....		1.00	1.00	.30	.30
Sundries.....		2.50	3.00		
First total.....		\$32.99	\$45.32	per	
Extra for man.....		2.55	3.25	month.	
Second total.....		\$35.54	\$48.57	per	
Per person per day.....		.237	.324	month.	

"The first total is adequate if the man of the family is engaged in ordinary labor. The second total allows for 1,000 calories extra food

for heavy work. If the labor performed is that of a lumberman or harvest hand, a further increase of three and a quarter dollars is necessary.

“Additional children will add the following amounts to the food budget:

Between 3 and 6 years	\$ 5.70 per month
Between 6 and 9 years	6.75 per month
Between 9 and 13 years	7.90 per month
A girl over 13 years	9.00 per month
A boy over 13 years	10.50 to \$11.00 per month

“The item of ‘Sundries’ includes such articles as corn starch, syrup, cheese, salt, pepper, mustard, yeast, etc.

“The diet here presented expresses the minimum on which health and efficiency can be maintained. It admits of many rearrangements between the staples of the same class, according to the preferences of people of different nationalities; more macaroni, less rice; more vegetables, less fruit; more meat and less milk; but no appreciable variations could be made in the cost without a corresponding decrease in the nourishment. In view of this fact the increase in cost of 33½ per cent is serious.

“It is unnecessary to say that many families live on much less than the diet given, which may account for a large proportion of stunted children, many diseases, early death, or inefficiency.

“*Clothing.*—This item of expense varies greatly according to the ages of the children and the ability of the family to live up to any kind of standard. But the increase averages 33½ per cent. The most important item under this heading is shoes, the price of which has increased in greater proportion than that of other articles of clothing. It is impossible to reduce the cost of shoes, as can be done with other kinds of wearing apparel, by making up cheap material at home.

“Shoes show an increase in price of 50 per cent at present, but this will undoubtedly be changed to 100 per cent in the near future when the retailers are obliged to replace their stock at the ruling wholesale prices. The following estimate of the shoe cost for the family considered is conservative and shows an increase of 50 per cent for the past year.

COST OF SHOES PER MONTH FOR FAMILY OF FIVE.

	1916	1917
Shoes	\$3.25	\$5.00
Repairs.....	2 00	3.00
	\$5.25	\$8.00

"Rent.—The prices paid for rent in cities by families of small income range from \$12 to \$17, so that \$15 seems a fair average for the budget of the family.

"Since the food cost is often 40 or 50 per cent, and the rent 20 per cent of small incomes, and since clothing, which often takes the lion's share of the balance, has increased 33 $\frac{1}{3}$ per cent, it would seem that enough data are at hand to warrant a preliminary budgeting for a family with an assumed income of \$75 a month.

	1916	1917
Rent	\$15.00	\$15.00
Light.....	1.50	1.50
Fuel.....	3.00	3.00
Food.....	33.00	45.00
Shoes.....	5.25	8.00
	<hr/>	<hr/>
Balance	\$17.75	\$72.50
	17.25	2.50
	<hr/>	<hr/>
Income	\$75.00	\$75.00

"In 1916 there was a balance of \$17.25 a month to cover such other expenses as

Insurance	Clothing (except shoes)	Vacation
Organization dues	School incidentals	Recreation
Drugs	Household upkeep	Amusements
Doctor bills	Church support	Incidentals
Dentist bills	Car fares	Emergencies

"In 1917 there is \$2.50 a month left to cover this long list of items, many of which are unavoidable, others urgent, and few of which can be omitted.

"The higher prices have in all probability been met by a reduction in the food supply of the family. Rent *must* be paid, shoes and some little clothing *must* be bought, other incidentals must be met, but food, which is the largest item of expense and is susceptible of manipulation, can generally be reduced. This should *not* be done at the expense of the growth and development of the children and the efficiency and endurance of the adults."

III—A MINIMUM BUDGETARY ESTIMATE FOR PACIFIC COAST WORKERS.

Dr. Jessica B. Peixotto, of the faculty of the University of California, in October, 1917, prepared a detailed estimate of the minimum outlay required for a workingman's family of husband, wife, and three children of school age, in San Francisco. This amount she placed at \$110 a

month with the statement that it covered a minimum standard of wholesome living and not mere subsistence.

"The typical worker in San Francisco," she states in her explanatory comment, "belongs to a class which insists upon having food enough to provide a palatable and somewhat varied dietary; shelter and clothing that conforms to the traditional idea of the 'decencies' rather than the 'necessities'; some income to pay for schooling the children, for relaxation in leisure hours, and something to provide against the risks of ill-health, invalidity and death. Though the total looks large, it is actually little above Miss Byington's estimates in her Homestead Study, considering the rise in the prices of food and clothing. Inspection of the individual items will show that very modest sums have been assigned to each class of wants. The housewife who keeps within the amounts specified must still have to be a cautious purchaser, and capable in preparing foodstuffs and industrious in making clothing.

"It would seem, then, that the present scale of wages is such that a family of man, wife and three children of school age cannot be maintained without getting into debt or receiving aid on much less than \$110 a month. When the normal breadwinner is paid less than this sum, one of three things, any one of them harmful for the group and for the community, is likely to happen :

"1. Other members of the family will have to work to eke out the income; or

"2. There will be less food than is necessary for the men to do efficient work. The risks of ill-health to all members of the group and the consequent costs to the group and to the society are equally plain; or

"3. The group must go without many of the articles noted under Sundries and House Operations. The probabilities of stupidity, early breakdown, and dependency are evident, for the expression of the more subtle capacities, the capacity for foresight, for generosity, for sociability, depends on having some money for 'Sundries.' One of the most important differences between social dependents, potential or actual, and self-supporting citizens is that social dependents are willing to go without the money for 'Sundries', and capable men and women recognize the imperative need for the money that will buy those things the term covers."

STANDARDS OF LIVING.

LIVING EXPENSES FOR FAMILY OF FIVE.

Items.	Month	Year.	Total.
Rent	\$20.00	\$240.00	\$240.00
House Operation	11.50	138.00	138.00
Fuel	3.00	36.00	
Light	1.50	18.00	
Laundry .....	.25	3.00	
Soap, matches, etc.	1.00	12.00	
Garbage removal .....	.25	30.00	
Furnishings—maintenance and additions.....	1.50	18.00	
Telephone	1.50	18.00	
Incidentals—occasional help, repair of house.....	45.00	540.00	540.00
Food	288.40	288.40	288.40
Clothing	74.50		
Man	73.90		
Wife	140.00		
Children (3, all under 12 years).....	22.50	270.00	270.00
Sundries	4.00	48.00	
Car fare	1.25	15.00	
Medicines	5.00	60.00	
Doctors and dentists.....	5.00	60.00	
Savings (for invalidity).....	1.25	15.00	
Organization dues	2.00	24.00	
Insurance (burial) .....	.25	3.00	
Stamps and stationery.....	1.25	15.00	
Newspapers, school supplies, etc.	1.00	12.00	
Tobacco, drinks, etc. ....	.50	6.00	
Church, charity, etc.	1.00	12.00	
Gifts (Christmas, etc.).....			
Grand total.....			\$1,476.40

EXPENDITURE FOR CLOTHING.

MAN.		WIFE.		CHILDREN (3 under 12)	
Article.	Price.	Article.	Price.	Article.	Price.
1 business suit (at \$20 lasts 2 years).....	\$10.00	1 street dress (at \$20 lasts 2 years).....	\$10.00	9 suits or dresses.....	\$25.00
1 overcoat (at \$20 lasts 5 years).....	4.00	1 house dress.....	3.00	3 coats.....	15.00
1 extra trousers.....	5.00	Waists	5.00	15 sets of underwear..	15.00
4 shirts.....	3.00	Stockings	3.00	24 pairs stockings....	8.00
5 collars.....	.75	Aprons .....	.90	3 to 5 hats.....	5.00
2 cravats.....	.50	Underwear	5.00	Sundries—Cravats, ribbons, mufflers, sweaters, aprons, rompers, etc.	17.00
3 underwear.....	5.00	Hats	5.00		
2 nightwear.....	2.00	Gloves	1.50		
6 pairs sox.....	1.50	Coat (at \$20 lasts 2 years)	10.00		
2 pairs shoes.....	10.00	Handkerchiefs	1.50		
Repairs on shoes.....	3.75	2 pairs shoes.....	10.00		
1 pair slippers, gum shoes, etc.	1.25	Repairs on shoes.....	3.75		
Handkerchiefs	1.00	House shoes.....	3.25		
1 hat (at \$3.00 lasts 2 years)	1.50	Sundries — Hairpins, veils, toilet articles, repairs of clothing, frills, etc.	5.00		
1 cap.....	.75	1 ceremonial dress (at \$21 lasts 3 years)...	7.00		
Sundries — Muffler, sweater, gloves, purse, watch fob, umbrella, etc.	5.00				
			\$73.90		
91	\$65.00				\$140.00 85.

SUMMARY TABLE.

Items.	Amounts.
Rent	\$ 240.00
House operation.....	138.00
Food	540.00
Clothing	288.40
Sundries	370.00
Grand total.....	\$1,476.40

The accompanying budget is not one for an *ideal* family. The ideal wife is one who wastes no calories in food preparation and one having the expert knowledge of sewing of a graduate in domestic economy; but few actual wives have had the benefit of such education.

The budget is, however, a *generalized* budget. Thus some men smoke and some do not. The item for smoking should be generalized, very much as the statistical term, the arithmetic mean, is a generalized term.

Actual budgets *vary* around a particular definite level, just as men vary in stature and weight. Particular extremes are therefore not cited; but the items have been set near an approximate arithmetic mean of budgets, many of which have been collected from existing families; although there is some argument for setting items nearer the upper variations than near the mean.

The budget is for a family of five. Three children are chosen for various reasons. (a) Three children at least are necessary for the race to perpetuate itself. (b) Federal and state experts do not make out budgets for less than families of five; thus, neither public nor expert opinion sanctions a smaller standard. (c) Standards of a warring and industrially competing nation would seem to demand three children as a minimum. (d) Unmarried men are less desirable than married men, individually and socially, physically and morally; and the economic barrier to marriage is recognized as an important one. (e) The family of five, while larger than the average in the company's employ, may nevertheless be taken as the standard family of workmen receiving the maximum hourly rate, and the lower differentials worked out from this rate.

REMARKS ON CLOTHING BUDGET.

The clothing estimates are made on the assumption that the wife does some sewing and remaking of some garments for the children. The figures are based on estimates of the life of garments to fractions of years. The clothing is also for a generalized family.

CLOTHING.

Man—	
Top coats (mackinaw-overcoat, sweater).....	\$ 12.50
Suits (uniform, suit, extra trousers).....	34.00
Shoes (and repairs).....	14.00
Overshoes.....	1.50
Underwear (woolen and cotton).....	6.00
Night garments.....	1.50
Hats (uniform cap and hat).....	3.00
Shirts (flannel and cotton).....	6.50
Socks.....	3.00
Gloves (average conductor and motorman).....	5.00
Ties, collars and handkerchiefs.....	2.00
Suspenders and garters.....	1.00
Incidentals (cuff buttons, brush, etc.).....	.50
Total.....	\$90.50

STANDARDS OF LIVING.

CLOTHING—Continued.

Woman—	
Top coat.....	\$ 8.00
Suits	12.50
Shoes (and repairs).....	14.00
Rubbers .....	.50
Underwear	5.00
Nightgowns	3.00
Underskirt	2.00
Corset	3.00
Kimono .....	.50
Waists	4.50
House dresses.....	5.00
Street dress.....	7.50
Hats	9.00
Gloves	2.50
Incidentals (veils, pius, purse, brush, slippers, handfs., etc.)..	4.50
Stockings	2.50
Aprons	2.00
Umbrella	1.00
Total.....	\$87.00

Boy of 13 or 14 years—	
Top coat (mackinaw and sweater).....	\$ 4.50
Suit (and trousers).....	14.50
Shoes (and repairs).....	15.00
Underwear	4.00
Night garments.....	1.50
Hats	2.00
Shirts	3.00
Stockings	2.50
Ties, handkerchiefs, etc.....	1.50
Total.....	\$48.50

Girl of 8 or 9 years—	
Top coat (and sweater).....	\$ 5.00
Shoes (and repairs).....	12.00
Underwaists and garters.....	1.50
Dresses (school and best).....	5.75
Petticoat (or bloomers).....	1.00
Night garments.....	1.50
Hats	1.75
Stockings	2.00
Ribbons and handkerchiefs.....	1.00
Umbrella	1.00
Underwear .....	.00
Total.....	\$32.50

Boy of 5 or 6 years—	
Top coat (and sweater).....	\$ 4.00
Shoes (and repairs).....	11.00
Suits (wash, best and coveralls).....	8.00
Rubbers	1.50
Underwaists and garters.....	1.50
Night garments.....	1.00
Hats (and caps).....	1.25
Waists (and blouses).....	2.00
Mittens, ties, handkerchiefs.....	.75
Stockings	2.00
Underwear .....	.00
Total.....	\$33.00

REMARKS ON FOOD BUDGET.

Various dietaries with differing proportions of meats, vegetables, fats, etc., have been constructed and each totals nearly the same figure. The calorie requirements are slightly over 12,000 a week for a family of five, distributed as follows: man, 3,400; woman, 2,700; boy of thirteen or fourteen, 2,700; girl of eight or nine, 2,000; boy of five or six, 1,500. The figure for meat is a little lower than is actually found among the carmen's families, but it is quite probable that during war time the item for meat will become progressively lower.

FOOD	
Cereal.....	\$ 26.00
Vegetables.....	78.00
Fruit.....	41.60
Meat and meat substitutes.....	98.80
Flour.....	16.64
Bread.....	52.00
Fats.....	93.60
Sugar.....	23.40
Milk.....	87.36
Coffee and tea.....	16.00
Total.....	\$533.40

REMARKS ON SUNDRIES.

The insurance and savings item is larger than actually occurs, due probably to the fact that expenses and wages do not at present permit saving. The item is conservatively low. Medical and dental care varies widely, but \$60 seems to be near the present average. The miscellaneous item is included because it actually exists.

SUNDRIES.	
Amusements (movies, vacations, picnics, etc.).....	\$ 30.00
Education and literature.....	11.00
Insurance and savings.....	130.00
Comforts (tobacco, candy, Christmas, etc.).....	30.00
Organizations.....	20.00
Dental and medical care.....	60.00
Incidentals (stamps, barbers, stationery, etc.).....	25.00
Household (furniture, laundry, tools, etc.).....	40.00
Miscellaneous (exigencies and waste).....	20.00
Total.....	\$366.00

REMARKS ON RENT, ETC.

In some houses the water is not included in the rent. Gas has recently risen, and the estimate is on the proposed raise.

RENT, ETC.	
Rent and water.....	\$184.00
Gas.....	20.00
Light.....	15.00
Fuel.....	60.00
Car fare.....	35.70
Total.....	\$314.70

**REMARKS ON THE RATE OF WAGES TO BE SET, BASED ON THE
STANDARD OF LIVING.**

The standard of living estimated for a carman's family is \$1,520 a year at prevailing prices. If the employe six years and over with the company averages 288 hours of work a month, then his rate of pay should be 43 cents an hour in order to earn the standard of living wage. If the company maintains the present differential for years of service in the employ, then a man five years in the service should receive 41 cents; one for four years, 40 cents, and so on, to 36 cents for the first six months of service.

Light may be thrown on the wage increase from another angle, that of the correlation of rising prices and rising wages. A survey recently conducted in Seattle by the departments of Economics and Sociology of the University of Washington, for the United States Government, showed that for the eighteen months since June 1, 1916, the cost of living, including rent, fuel, sundries, food, and clothing, had risen 34 per cent, and figures based on various prices indicated a continued rise of considerable magnitude for 1918, despite the efforts of Mr. Hoover. The maximum hourly rate of wages for carmen, June 1, 1916, was 31 cents. If the carmen six years and over in the service maintain the same standard of living in October, 1917, that they had in June, 1916, the maximum rate should be 41.5 cents. This figure would represent a lowering of the standard of living from December 1, 1913, when the 31 cent rate went into effect, because the cost of living has risen more since December 1, 1913, than it has since June 1, 1916. This figure of 41.5 cents is estimated for October, 1917, a time when prices are less than they will be in the Spring of 1918. So, even assuming a continuance of the same standard of living as formerly, the hourly wage should be somewhat above 41.5, probably several cents. Inquiry has recently been made of the foremost authority on prices in the United States as to the probable fall in prices after the war, or their probable continuance at a high level. The reply was that a definite prediction cannot be made, but probabilities, he thought, were for continued high prices.

IV—BUDGET PROPOSED BY SEATTLE AND TACOMA (WASH.) STREET RAILWAY EMPLOYES.

In the course of the arbitration proceedings between the Seattle and Tacoma street railway companies and their employes, the attorneys for the employes, Reynolds and Harrow, submitted in their brief a minimum budget for the street railway workers, based on evidence which had been placed before the Board of Arbitration. After compiling retail prices, they weighted the prices of food and fuel according to the Washington State Bureau of Labor budget.

COST OF LIVING FOR FAMILY OF FIVE PERSONS.

Groceries, meats and fish.....	\$540.95
Fuel	59.70
Clothing for wife.....	174.47
Clothing for girl of 12 years.....	90.56
Clothing for boy of 14 years.....	76.04
Clothing for extra child.....	83.30
Clothing for man.....	187.50
Maintenance household equipment.....	60.00
Education of children.....	12.00
Dues to church or fraternal society.....	12.00
Dentistry, medicine, etc.....	60.00
Insurance	120.00
Reading matter, music, etc	30.00
Savings for old age.....	120.00
Gas for household use.....	22.16
Electric light	12.00
Rent and water.....	180.00
Street car fare.....	65.00
Tobacco, ice cream, etc.....	12.20
Total	\$1,917.88

V—BUDGET AWARDED TO SEATTLE AND TACOMA (WASH.) STREET RAILWAY EMPLOYES.

The Board of Arbitration referred to in the previous section awarded the following minimum budget as the basis of its wage award, in December, 1917:

FINDINGS OF THE BOARD OF ARBITRATION APPOINTED TO DETERMINE MATTERS IN CONTROVERSY BETWEEN THE PUGET SOUND TRAC- TION, LIGHT & POWER CO., THE TACOMA RAILWAY & POWER COMPANY AND THEIR EMPLOYES.

Groceries—Meat—Fish.....	\$533.40
Fuel.....	60.00
Clothing—man.....	90.50
Clothing—woman.....	87.00
Clothing—girl of 8 or 9.....	32.50
Clothing—boy of 14.....	48.50
Clothing—boy of 5 or 6.....	33.00
Maintenance of household equipment.....	40.00
Education.....	11.00
Church—Fraternal dues.....	20.00
Medicine—doctor, dentist.....	60.00
Insurance.....	30.00
Reading matter, music.....	*
Savings.....	100.00
Gas.....	20.00
Electric light.....	15.00
Rent and water.....	184.00
Street car fare.....	35.70
Tobacco, ice cream.....	30.00
Recreation—movies, etc.....	30.00
Incidentals—stamps, barber, etc.....	25.00
Miscellaneous.....	20.00
Total.....	\$1,505.60

*See Education.

Minimum Comfort
for one year for a
family of five.

TOTAL BUDGET

Clothing.....	\$ 291.50
Food.....	533.40
Sundries.....	366.00
Rent, etc.....	314.70
Total.....	\$1,505.60

REMARKS ON TOTAL BUDGET.

This budget may be called a minimum comfort budget and is slightly higher than a minimum health budget. Various minimum health budgets have been constructed and vary slightly from city to city and significantly from year to year as the cost of living rises. The minimum comfort budget has been rarely set by experts. Theoretically such a standard would vary according to the definition of comfort of the particular investigator. Practically such varying levels are not as great as would seem theoretically because minimum comfort budgets, actually existing, group around a definite level.

VI—A MINIMUM MONTHLY DIET AND ITS COST.

The cost of a minimum monthly diet upon which health can be maintained by a family of five has been estimated by Professor Jaffa, of the University of California, at \$45.32 per month, or \$543.84 annually. The cost of this diet he shows has advanced from \$27.09 a month in 1912, and \$29.66 a month in 1914, to \$45.32 in 1917, an increase of 67 per cent in the ten years, 1907-1917. The detailed statement of this diet and its increase in cost, is as follows:

TABLE SHOWING INCREASE IN COST OF FOOD FROM
MAY, 1907, TO MAY, 1917.

Minimum Diet on Which Health Can Be Maintained for a Workingman, His Wife and Three Children Between 4 and 14 Years of Age.

Food materials.	Food and cost for one month.				
	Pounds	1907	1912	1916	1917
Class I—					
Meat and fish.....	50	\$5.75	\$7.25	\$8.00	\$10.00
Milk	120	4.80	4.80	4.80	6.00
Eggs	6	.81	1.12	1.08	1.56
Beans	8	.40	.40	.40	1.60
Class II—					
Flour	60	1.88	1.92	1.92	4.80
Cereals	17	.49	.77	1.02	1.36
Macaroni	4	.28	.32	.32	.50
Rice	10	.60	.60	.60	.83
Class III—					
Potatoes	35	.70	1 65	1.05	2.17
Vegetables	55	1.33	1.65	1.65	1.65
Fruits	50	2.25	2 10	2.50	2.50
Class IV—					
Butter	8	2.29	2.55	2.40	3.60
Oils and fats.....	10	1.35	1.90	2.90	2.50
Class V—					
Sugar	25	1.38	1.53	1.75	2.25
Extras—					
Coffee and tea.....	2	.73	1.00	1.00	1.00
Sundries		2.00	2.30	2.50	3.00
Total, per month.....		\$27.09	\$29.66	\$32.99	\$45.32

Sundries include yeast, corn starch, cocoa, cheese, syrup, salt, etc.

VII—TENTATIVE BUDGET OF PHILADELPHIA BUREAU OF MUNICIPAL RESEARCH.

On December 20, 1917, the Bureau of Municipal Research of the City of Philadelphia, which was organized to promote efficient and scientific management of municipal business, submitted a tentative budget as a minimum standard of living for a workingman's family. It was accompanied by the following statement:

"A recent press notice of the Patriotic Education Society, in commenting upon the present labor situation, states that 'the Government must make a comprehensive study of living conditions in all sections of the United States. * * * * * Then Government arbitrators can say, with real knowledge of conditions, what is a fair day's pay, instead of basing their decision on the argument of might.'

"The world tragedy now upon us is forcing us to think fundamentally on many issues that we have been wont to pass over superficially. In the statement quoted above we have a bit of fundamental thinking on the perennial issue of a 'fair day's pay' that is decidedly encouraging. The 'law of supply and demand,' which has served for so long to blind men to the real social significance of the wage question, is quietly left out of account and 'living conditions' are frankly recognized as the vital factor in determining wages. In other words, we are asked henceforth to make the standard of living that we wish our citizens to maintain our prime concern in dealing with labor.

"The Bureau of Municipal Research is in hearty agreement with this view. As a matter of fact, in its endeavor to arrive at a 'fair day's pay' for laborers employed in the city government, it has begun an inquiry into the cost of living of a workingman's family in Philadelphia. As a result of this inquiry it is hoped to establish a standard of living, expressed in *actual goods and services*, that will enable a family to live in a manner befitting the citizens of a great democracy. * * *

"For this purpose we are submitting, as a basis for discussion merely, a tentative minimum standard expressed mainly, for the sake of brevity, in dollars and cents. * * * Since this tentative standard is *so decidedly the minimum on which a family can exist*, we would be especially pleased to have your suggestions take the form of how much more ought to be added to make it a fair standard."

The budget submitted was as follows:

Tentative Minimum Standard of Living for a Family of Five, Composed of Two Adults and Three Children Under Income-Earning Age.

Housing—\$15.00 per month.....		\$180.00
This provides from four to six rooms, depending upon locality.		
Fuel and light.....		75.00
Four and one-half tons of coal.....	\$ 39.38	
Gas.....	33.80	
Kindling, matches, etc.....	1.82	
Food.....		590.00
Food.....	\$581.67	
Ice.....	8.33	
Clothing.....		166.00
Health.....		27.00
For services of physician, dentist, oculist and nurse, and also for surgical appliances, drugs, etc.		
Furniture and furnishings.....		20.00
Replacements of towels, bedding, dishes, breakage, etc.		
Taxes, dues and contributions.....		20.00
To government, churches, patriotic societies, etc.		
Recreation, vacation and amusements.....		15.00
Education and reading.....		11.00
School expenses.....	\$1.50	
Newspaper.....	8.84	
Postage and stationery.....	.66	
Insurance.....		23.40
Carfare.....		32.30
To and from work and one dollar for the rest of the family for the year.		
Cleaning, supplies and services.....		20.00
Soap, washing material, brooms, brushes, laundry, etc.—thirty-eight cents per week.		
Other expenses.....		20.30
Includes funeral expenses, moving expenses, tobacco and refreshments.		
Total.....		\$1,200.00

VIII—DEPARTMENT OF HEALTH, NEW YORK CITY.

In October, 1917, Inspector Graef, of the Department of Health, New York City, made a careful comparison of the costs of the various elements in a standard, palatable weekly dietary for a family of five in the largest cities of the United States. The results of his study in terms of weekly and annual expenditures for food, by leading cities, was as follows:

Kind of food.	New York City.	Average of 24 cities throughout U. S.	Boston.	Chicago.	New Orleans.	San Francisco.
Canned goods.....	\$0.185	\$0.177	\$0.180	\$0.200	\$0.200	\$0.150
Cereals.....	2.943	3.144	2.202	3.153	3.022	2.902
Dried fruits.....	.690	.650	.670	.626	.625	.605
Sugar and syrup.....	.515	.570	.515	.537	.540	.581
Dairy products.....	3.340	3.343	3.925	3.165	2.801	2.950
Vegetables.....	.665	.673	.765	.685	.660	.582
Meats and fish.....	3.229	2.717	2.834	2.834	2.409	2.284
Condiments.....	.110	.110	.110	.110	.110	.110
Total weekly cost of food budget.....	\$12.953	\$12.685	\$12.451	\$12.593	\$11.929	\$11.460
Annual cost.....	673.40	659.36	647.40	654.68	619.36	595.92

The annual cost of this minimum food diet for a family of five ranges, as it will be noted, from \$595.92 in San Francisco to \$673.40 in New York City. The average of 24 cities throughout the United States was \$659.36.

IX—BUDGET OF THE ANNUAL COST OF LIVING, 1914-1919,

**COMPILED BY THE STATE BUREAU OF LABOR,
OLYMPIA, WASHINGTON.**

Beginning with April, 1914, the Washington State Bureau of Labor has instituted during the month of April of each year a special investigation of prices of food and fuel. Statistics are secured by field agents from about forty retail dealers in as many towns and cities throughout the State. As to the relative importance of different items of expenditure the Labor Commission states that "when the budget was first prepared, a great many families were interviewed as to varieties of articles and quantities thereof necessary for a family of five during a period of one year, so that in this particular the average amounts used are also accurate.

"A careful perusal will also convince that the quantities estimated are conservatively low. Flour, 686 pounds for a year, means only about six ounces per day per person, for a family of five; potatoes, 800 pounds, means about seven ounces per day. Flesh meat and fish allowances are very small."

The budgetary table is divided into three sections: one showing the cost of groceries; a second, the costs of flesh meats and fish; and a third, fuel costs. Comparative cost for two of the largest industrial cities of the State, Seattle and Spokane, are shown in the table below for the four years, 1914-1919.

Table Showing the Annual Cost of Foodstuffs and Fuel for a Family of Five.

[Survey made in month of April of each year indicated.]

Quantity and article.	Seattle.				Spokane.			
	1914	1915	1916	1917	1914	1915	1916	1917
260 lbs. sugar, granulated cane.....	\$13.00	\$16.90	\$22.36	\$23.92	\$14.04	\$17.68	\$21.06	\$24.96
14 sacks flour, fancy patent, 49-lb.....	19.08	25.90	21.84	38.74	19.08	26.00	20.30	41.02
2 sacks corn meal, 10-lb.....	.65	.68	.68	.90	.68	.74	.68	1.00
75 lbs. rolled oats, bulk.....	3.56	4.05	3.75	3.98	3.25	3.60	3.75	4.43
8 cwt. potatoes, white.....	9.00	17.40	15.12	34.00	5.56	11.71	12.00	32.80
25 lbs. beans, navy.....	1.85	1.93	2.38	4.18	1.75	1.95	2.00	3.48
26 lbs. onions, dry.....	1.69	.73	.91	3.17	1.56	.83	.78	3.35
12 lbs. barley, pearl.....	.84	1.00	1.00	1.12	1.02	1.04	.96	1.20
10 lbs. split peas.....	.70	.90	.90	.97	.85	.99	.95	1.13
22 lbs. rice, Japan.....	1.41	1.61	1.87	1.61	1.71	1.89	1.76	2.00
80 lbs. butter, creamery.....	25.00	23.52	30.48	36.00	26.80	26.32	30.80	37.04
25 lbs. butter, ranch.....	6.88	6.25	10.00	10.73	6.67	6.60	7.50	10.63
30 lbs. soda crackers.....	3.00	2.79	2.85	3.84	2.70	2.97	3.15	4.56
80 doz. eggs, fresh.....	19.52	19.76	22.00	28.88	20.00	19.20	20.00	31.04
4 lbs. macaroni.....	.36	.35	.30	.33	.39	.35	.32	.30
20 lbs. cheese, American.....	5.00	4.62	5.00	5.92	5.25	4.66	5.20	6.00
6 lbs. cheese, imp. Swiss.....	2.18	2.28	3.12	2.28	2.20	2.50	2.40	3.90
12 lbs. raisins, seedless.....	1.29	1.43	1.57	1.60	1.27	1.42	1.54	1.90
20 lbs. dried prunes.....	2.40	2.58	2.62	2.66	2.35	2.50	2.16	2.76
8 doz. lemons.....	1.92	1.65	1.68	1.94	2.30	1.66	1.70	2.00
3 gals. syrup, corn.....	1.80	1.67	1.65	1.97	2.23	1.91	1.92	2.35
10 lbs. comb honey.....	1.94	1.91	1.83	1.92	1.90	1.75	1.63	1.83
3 gals. pickles, sour.....	1.65	1.82	1.95	1.52	1.61	1.60	2.10	2.37
3 gals. vinegar, cider.....	1.39	1.20	1.18	1.15	1.16	1.11	1.17	1.15
18 cans canned tomat- oes, No. 3.....	2.70	2.65	2.52	2.93	2.70	2.70	2.86	3.60
22 cans canned corn, No. 2.....	2.24	2.42	2.75	3.12	2.82	2.40	2.64	3.39
20 cans canned peas, No. 2.....	2.60	2.64	2.80	2.76	2.80	2.58	2.66	2.60

Table Showing The Annual Cost of Foodstuffs and Fuel for a Family of Five—Concluded.

Quantity and article.	Seattle.				Spokane.			
	1914	1915	1916	1917	1914	1915	1916	1917
9 cans canned beans, No. 2.....	1.24	1.22	1.07	1.31	1.26	1.22	1.18	1.42
3 lbs. baking soda.....	.25	.27	.29	.23	.30	.27	.26	.29
9 lbs. baking powder, cream tartar.....	4.05	4.09	4.28	4.28	4.05	4.08	3.83	4.05
12 lbs. corn starch.....	1.06	1.08	1.15	1.04	1.20	1.14	1.02	1.30
50 lbs. carrots.....	.59	.95	1.06	1.65	.59	.80	.85	1.65
35 lbs. cabbage.....	1.40	1.37	1.40	2.73	1.66	1.51	.88	3.40
40 lbs. coffee, medium grade.....	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
10 lbs. tea, medium grade.....	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
12 pts. tomato catsup.....	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
20 lbs. salt.....	.67	.67	.67	.67	.67	.67	.67	.67
85 bars soap.....	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25
Vegetables.....	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Fruit.....	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Milk, fresh and condensed	33.00	33.00	33.00	36.50	33.00	33.00	33.00	36.50
Total for groceries.....	\$236.66	\$254.04	\$268.78	\$331.30	\$238.13	\$252.10	\$256.43	\$342.82
Weekly average.....	4.55	4.89	5.17	6.37	4.58	4.85	4.93	6.59
1914 Relative per- centages.....	100.	107.	114.	140.	100.	106.	108.	144.
74 lbs. lard.....	\$11.66	\$11.54	\$11.10	\$19.24	\$11.10	\$10.80	\$11.69	\$21.09
5 cans canned oysters, No. 2.....	1.22	1.18	1.05	1.02	1.19	1.15	1.00	1.09
5 cans canned clams, No. 1.....	.69	.64	.63	.71	.69	.68	.66	.73
24 lbs. canned salmon, No. 1.....	3.90	4.51	4.32	5.11	4.80	3.91	3.89	5.78
40 lbs. smoked bacon.....	10.90	11.04	11.20	14.12	10.16	9.04	9.40	13.84
20 lbs. smoked ham.....	4.35	4.28	5.00	6.14	4.28	3.72	4.24	6.64
10 lbs. smoked shoulder.....	1.63	1.47	1.42	2.50	1.53	1.40	1.64	2.25
150 lbs. roast beef.....	30.00	31.20	31.50	35.85	24.00	29.70	32.63	25.80
100 lbs. boiling meat.....	12.00	11.80	12.40	12.50	9.60	10.90	12.50	12.70
120 lbs. steak.....	22.40	22.32	22.56	27.96	21.84	22.56	24.00	25.56
40 lbs. veal.....	7.76	7.76	7.28	8.72	7.28	9.28	7.72	9.68
50 lbs. mutton.....	8.00	9.30	10.70	10.35	6.25	9.20	10.45	11.10
60 lbs. pork.....	11.00	10.86	10.86	14.76	9.72	10.20	10.62	15.12
25 lbs. poultry.....	4.40	5.33	5.20	8.48	4.00	4.23	4.73	6.45
68 lbs. fresh fish.....	7.62	8.30	11.22	16.25	8.50	9.11	12.65	11.76
Total for meat and fish.....	\$137.53	\$141.53	\$146.44	\$183.71	\$124.94	\$135.88	\$147.82	\$169.59
Weekly average.....	2.64	2.72	2.81	3.53	2.40	2.61	2.84	3.26
1914 Relative per- centages.....	100.	103.	106.	134.	100.	109.	118.	136.
4½ cords wood, fir, stove length.....	\$25.52	\$29.25	\$27.45	\$27.56	\$35.46	\$31.95	\$33.75	\$37.50
4 tons coal.....	18.75	18.90	18.75	20.13	25.50	24.99	25.50	29.00
Total for fuel.....	\$44.27	\$48.15	\$46.20	\$47.69	\$60.96	\$56.94	\$59.25	\$66.50
Weekly average.....	.85	.92	.89	.92	1.17	1.09	1.14	1.28
1914 Relative per- centages.....	100.	109.	104.	108.	100.	93.	97.	109.
Totals:								
Groceries.....	\$236.66	\$254.04	\$268.78	\$331.30	\$238.13	\$252.10	\$256.43	\$342.82
Meat and fish.....	137.53	141.53	146.44	183.71	124.94	135.88	147.82	169.59
Fuel.....	44.27	48.15	46.20	47.69	60.96	56.94	59.25	66.50
Grand total.....	\$418.46	\$443.72	\$461.42	\$562.70	\$424.03	\$444.92	\$463.50	\$578.91
Weekly average.....	8.04	8.53	8.87	10.82	8.15	8.55	8.91	11.13
1914 Relatives.....	100.	106.	110.	134.	100.	105.	109.	137.

Table Showing the Annual Cost of Foodstuffs and Fuel for a Family of Five in 1918.

(Survey made in month of April, 1918.)

QUANTITY AND ARTICLE.	Seattle.	Tacoma.	Spokane.
200 lbs. Sugar, granulated cane.....	\$17.09	\$17.60	\$18.00
8 sacks Flour, 49-lb.....	22.18	22.17	21.70
2 sacks Cornmeal, 10-lb.....	1.47	1.46	1.52
75 lbs. Rolled Oats, bulk.....	6.31	7.35	6.93
20 lbs. Barley Flour.....	1.70	1.70	2.00
20 lbs. Oat Flour.....	1.73	1.66	2.00
10 lbs. Buckwheat Flour.....	.91	.82	1.00
10 lbs. Hominy.....	.88	.83	.80
12 cwt. Potatoes, white.....	19.53	14.28	16.06
25 lbs. Beans, navy.....	4.10	4.55	3.50
26 lbs. Onions, dry.....	.93	.68	.86
12 lbs. Barley, pearl.....	1.45	1.80	1.73
10 lbs. Split Peas.....	1.25	1.46	1.44
22 lbs. Rice, Japan.....	2.27	2.38	2.62
80 lbs. Butter, creamery.....	40.18	40.00	39.44
25 lbs. Lard Substitute.....	7.50	7.50	7.50
30 lbs. Crackers.....	5.91	6.21	6.39
80 doz. Eggs, fresh.....	34.67	34.64	31.60
4 lbs. Macaroni.....	.40	.43	.48
26 lbs. Cheese, American.....	8.19	8.53	9.10
12 lbs. Raisins, seedless.....	1.73	1.80	1.80
20 lbs. Dried Prunes.....	3.07	2.50	3.26
8 doz. Lemons.....	2.88	3.20	3.00
10 gals. Syrup, corn.....	10.07	7.92	11.00
3 gals. Pickles, sour.....	1.45	1.50	1.80
3 gals. Vinegar, cider.....	1.43	1.43	1.09
18 cans Canned Tomatoes, No. 3.....	3.18	2.57	3.60
22 cans Canned Corn, No. 2.....	3.61	3.21	3.17
20 cans Canned Peas, No. 2.....	3.36	2.78	3.26
9 cans Canned Beans, No. 2.....	1.55	1.29	1.69
3 lbs. Baking Soda.....	.25	.30	.30
9 lbs. Baking Powder, Cream Tartar.....	4.33	4.05	4.05
12 lbs. Corn Starch.....	1.37	1.28	1.57
50 lbs. Carrots.....	1.25	1.10	1.00
35 lbs. Cabbage.....	1.93	1.96	2.28
12 pts. Tomato Catsup.....	3.10	2.48	3.46
74 lbs. Lard.....	24.14	23.98	25.90
5 cans Canned Oysters, No. 2.....	1.01	1.00	1.42
5 cans Canned Clams, No. 1.....	.79	.79	.88
24 lbs. Canned Salmon, No. 1.....	6.29	5.11	8.26
40 lbs. Smoked Bacon.....	21.17	21.32	20.00
20 lbs. Smoked Ham.....	7.69	9.20	7.60
10 lbs. Smoked Shoulder.....	2.80	3.57	2.60
150 lbs. Roast Beef.....	42.50	48.75	37.50
100 lbs. Boiling Meat.....	17.50	15.90	20.00
120 lbs. Steak.....	33.36	32.04	33.60
40 lbs. Veal.....	10.64	14.00	11.52
50 lbs. Mutton.....	16.05	18.75	16.50
60 lbs. Pork.....	19.68	21.00	20.94
25 lbs. Poultry.....	9.75	8.75	8.13
68 lbs. Fresh Fish.....	14.76	11.36	14.08
40 lbs. Coffee, medium grade.....	14.00	14.00	14.00
10 lbs. Tea, medium grade.....	4.50	4.50	4.50
20 lbs. Salt.....	.67	.67	.67
85 bars of Soap.....	5.10	5.10	5.10
Vegetables.....	20.00	20.00	20.00
Fruit.....	20.00	20.00	20.00
Milk, fresh or condensed.....	48.00	48.00	48.00
4 1/2 cords of Wood, stove length.....	59.40	40.50	36.00
4 tons coal.....	35.36	32.00	40.76
Totals.....	\$658.37	\$634.86	\$639.01

Table Showing the Annual Cost of Foodstuffs and Fuel for a Family of Five in 1919.

(Survey made in month of April, 1919.)

QUANTITY AND ARTICLE.	Seattle.	Tacoma.	Spokane.
260 lbs. Sugar, granulated cane.....	\$27.30	\$27.82	\$28.34
14 sacks Flour, fancy patent, 49 lbs.....	42.76	41.54	42.57
2 sacks Cornmeal, 10 lbs.....	1.30	1.25	1.41
75 lbs. Rolled Oats, bulk.....	5.33	5.63	5.03
8 cwt. Potatoes, white.....	15.80	14.66	11.68
25 lbs. Beans, navy.....	2.60	2.68	2.63
26 lbs. Onion, dry.....	1.46	1.12	1.82
12 lbs. Barley, pearl.....	1.25	1.60	1.15
10 lbs. Split Peas.....	1.00	1.25	1.40
22 lbs. Rice, Japan.....	2.20	2.64	2.75
80 lbs. Butter, creamery.....	50.88	49.84	56.40
25 lbs. Lard Substitute.....	8.00	7.33	7.50
30 lbs. Soda Crackers.....	6.15	6.51	6.72
80 dozen Eggs, Fresh.....	40.00	40.56	37.04
4 lbs. Macaroni.....	.46	.45	.41
20 lbs. Cheese, American.....	8.20	8.00	7.90
6 lbs. Cheese, cream.....	2.85	2.40	2.34
12 lbs. Raisins, seedless.....	1.72	1.80	2.16
20 lbs. Dried Prunes.....	3.10	2.84	3.10
8 dozen Lemons.....	2.48	2.40	2.60
3 gals. Syrup, corn.....	3.05	3.10	3.10
10 lbs. Comb Honey.....	3.67	3.67	3.83
3 gals. Pickles, sour.....	3.00	3.60	2.85
3 gals. Vinegar, cider.....	1.86	1.10	1.30
18 cans Canned Tomatoes, No. 3.....	4.10	3.60	3.69
22 cans Canned Corn, No. 2.....	4.84	4.29	4.18
20 cans Canned Peas, No. 2.....	4.36	3.50	4.02
9 cans Canned Beans, No. 2.....	1.96	1.96	2.10
3 lbs. Baking Soda.....	.28	.29	.29
9 lbs. Baking Powder, Cream Tartar.....	5.70	6.60	5.52
12 lbs. Cornstarch.....	1.25	1.40	1.69
50 lbs. Carrots.....	1.90	1.90	1.40
35 lbs. Cabbage.....	2.63	3.50	2.31
40 lbs Coffee, medium grade.....	16.00	16.00	16.00
10 lbs. Tea, medium grade.....	5.00	5.00	5.00
12 pts. Tomato Catsup.....	3.70	3.20	3.34
20 lbs. Salt.....	1.25	1.25	1.25
85 bars Soap.....	5.27	5.27	5.27
Vegetables.....	20.00	20.00	20.00
Fruit.....	20.00	20.00	20.00
Milk, fresh and condensed.....	48.00	48.00	48.00
74 lbs. Lard.....	26.27	25.38	27.45
5 cans Canned Oysters, No. 2.....	1.54	1.50	1.50
5 cans Canned Clams, No. 1.....	.94	1.13	.90
24 lbs. Canned Salmon, No. 1.....	7.37	6.00	9.19
40 lbs. Smoked Bacon.....	21.52	21.68	20.72
20 lbs. Smoked Ham.....	8.88	9.56	8.62
10 lbs. Smoked Shoulder.....	3.33	3.57	3.00
150 lbs. Roast Beef.....	40.35	50.70	31.65
100 lbs. Boiling Meat.....	19.00	19.70	16.70
120 lbs. Steak.....	40.20	38.00	31.08
40 lbs. Veal.....	11.64	12.72	11.84
50 lbs. Mutton.....	19.35	18.30	14.90
60 lbs. Pork.....	23.34	14.12	23.52
25 lbs. Poultry.....	8.36	9.80	8.30
68 lbs. Fresh Fish.....	11.90	15.50	15.03
4 1/2 cords Wood, stove length.....	63.00	34.50	50.06
4 tons Coal.....	36.40	34.33	43.63
Totals.....	\$726.05	\$705.44	\$698.48

X—THE COST OF THE NAVY RATION FOR ENLISTED MEN.

According to the latest official information available, the cost to the Navy Department for the daily subsistence of its enlisted personnel for the first nine months of the fiscal year 1919 was 60 cents per man per day. The increase which this amount represents over recent years was recently testified to by Rear Admiral McGowan, Paymaster General of the Navy, as follows:

“MR. BUTLER—That is the cost of the ration, is it?

ADMIRAL MCGOWAN—It is going to be.

THE CHAIRMAN—I want to ask you what has heretofore been the cost, and what is it climbing up to now?

ADMIRAL MCGOWAN—In 1916 the average was 37.06 cents; in 1917 it was 43.08 cents; in 1918 it was 49.6 cents for the year; but the last quarter it was 52 cents. Of course, everybody knows the reason why food is costing more; but during the last year the Navy managed to cut off the market rise by 5 per cent, on the average. We saved \$1,500,000, or \$4,500 a day, by letting the cost of the ration rise less than the market would have justified it in rising.

Now, this new estimate is made on that same basis, that we do not propose to jump as far and as high as the market does. And these figures are absolutely rock-bottom—55 cents is practically 6 cents more than it was this past year; it has risen about 6 cents every year.

MR. BUTLER—You have made this estimate based on the reduction of the number of men to 350,000, have you?

ADMIRAL MCGOWAN—Yes, that is all on that basis.”

XI—CANADIAN BUDGET.

The Department of Labor of the Canadian (Dominion) Government prepares and publishes monthly the cost per week of a average family budget of staple foods, fuel and lighting, and rent. The following table, as published in the July (1919) number of the Canadian Labor Gazette, shows this budget in a comparative form for the period 1900-1919 (through June).

**Cost Per Week of a Family Budget of Staple Foods, Fuel and Lighting, and Rent, in
Terms of the Average Prices in Sixty Cities in Canada.**

Commodities	Quantity	1900*	1910	1912	1917	June, 1914	June, 1915	June, 1916	June, 1917	June, 1918	May, 1919	May, 1919
		c		c.	c.	c.	c.	c.	c.	c.	c.	c.
Beef, sirloin, steak	2 lbs.	27.2	.....	41.5	60.2	48.8	48.8	52.0	63.2	76.8	79.4	79.8
Beef, shoulder, roast	2 "	19.6	.....	28.0	41.3	33.2	33.6	35.0	43.6	55.6	55.6	55.8
Veal, roast, forequarter	1 "	10.0	.....	14.4	22.7	17.1	17.5	18.8	22.6	27.9	27.6	27.6
Mutton, roast, hindq'r.....	1 "	11.8	.....	17.8	28.1	21.0	21.5	24.2	28.5	36.7	36.7	36.8
Pork, fresh, roast, ham.....	1 "	12.2	.....	17.5	29.6	20.0	19.3	22.2	30.1	37.3	38.6	39.8
Pork, salt, mess	2 "	21.8	.....	33.2	53.5	36.4	35.8	40.2	54.0	69.5	71.0	72.0
Bacon, breakfast	1 "	15.4	.....	22.5	38.5	25.6	25.3	28.9	39.0	50.7	52.6	54.3
Lard, Pure Leaf	2 "	26.2	.....	35.6	59.4	37.2	35.8	40.2	62.2	73.8	75.2	80.4
Eggs, fresh	1 doz.	25.7	.....	34.3	48.9	25.8	24.8	28.6	42.5	44.8	51.4	53.7
Eggs, storage	1 "	20.2	.....	31.2	42.4	25.0	24.3	26.2	36.6	38.7	42.7	45.4
Milk	6 qts.	36.6	.....	49.8	62.2	51.6	52.8	51.0	58.8	71.4	81.0	79.2
Butter, dairy, solid	2 lbs.	44.2	.....	58.4	86.4	52.4	57.8	61.2	83.4	92.0	113.0	108.6
Butter, creamery, prints	1 "	25.5	31.9	31.7	48.0	31.2	33.8	35.1	46.8	51.7	63.6	61.1
Cheese, old	1 "	16.1	18.5	20.1	33.0	21.4	24.5	25.5	34.0	33.5	36.9	39.3
Cheese, new	1 "	14.6	17.5	19.5	30.4	19.4	22.8	23.8	32.0	30.5	34.9	37.3
Bread, plain, white	15 "	55.5	66.0	60.0	104.4	64.5	73.5	70.5	111.0	117.0	117.0	118.5
Flour, family	10 "	25.0	33.0	34.0	64.2	33.0	42.0	37.0	73.0	68.0	67.0	67.0
Rollod oats	5 "	18.0	21.0	22.0	30.5	21.5	26.5	24.0	31.5	40.5	37.0	37.0
Rice, good, medium.....	2 "	10.4	10.4	11.6	16.2	11.8	11.8	13.0	16.0	20.0	24.2	24.4
Beans, handpicked	2 "	8.6	10.8	11.6	29.8	11.8	14.4	19.5	30.4	34.4	23.8	23.4
Apples, evaporated	1 "	9.9	11.5	13.5	15.6	13.1	11.9	13.5	15.4	22.8	22.9	23.4
Prunes, medium size	1 "	11.5	9.9	12.8	15.4	12.3	13.1	13.2	15.1	17.6	20.3	21.2
Sugar, granulated	4 "	21.6	24.0	26.0	39.9	22.0	31.6	38.0	40.0	43.6	47.6	47.6
Sugar, yellow	2 "	10.0	10.8	12.0	18.5	10.2	14.6	17.6	19.0	20.4	22.2	22.2
Tea, Black, medium.....	¼ "	8.2	8.7	8.8	11.5	8.9	9.4	9.4	11.5	14.5	15.7	15.7
Tea, green, medium.....	¼ "	8.7	9.1	9.5	11.3	9.2	9.9	10.7	11.3	13.9	15.9	15.4
Coffee, medium	¼ "	8.6	8.9	9.3	10.1	9.4	9.8	9.9	10.1	11.1	12.5	13.1
Potatoes	2 pks.	24.1	30.3	46.3	89.2	40.2	30.0	60.5	127.0	60.7	65.7	70.7
Vinegar, white wine	¼ pt.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
All foods.....		\$5.48	\$6.95	\$7.34	\$11.42	\$7.35	\$7.78	\$8.81	\$11.85	\$12.71	\$13.53	\$13.72
Starch, Laundry	½ lbs.	c. 2.9	c. 3.1	c. 3.2	c. 4.0	c. 3.2	c. 3.2	c. 2.3	c. 3.9	c. 4.7	c. 4.7	c. 4.7
Coal, anthracite	1-16 ton	39.5	48.1	51.9	67.0	53.2	51.6	54.4	67.3	71.8	78.8	73.5
Coal, bituminous	" "	31.1	35.0	37.5	52.7	39.4	37.2	37.4	53.9	58.1	61.6	64.6
Wood, hard	" cord	32.5	38.8	41.3	52.9	41.8	34.3	41.8	51.9	67.4	101.5	76.4
Wood, soft	" "	22.6	29-4	30.0	38.9	39.1	31.3	30.2	39.4	49.6	56.3	56.4
Coal oil.....	1 gal.	24.0	24.4	21.0	25.0	24.1	23.5	23.0	25.4	27.6	28.1	28.7
Fuel and lighting		\$1.50	\$1.76	\$1.82	\$2.37	\$1.90	\$1.79	\$1.87	\$2.38	\$2.75	\$3.26	\$3.00
Rent.....		\$2.37	\$4.05	\$4.60	\$4.32	\$4.86	\$4.11	\$4.04	\$4.30	\$4.77	\$5.08	\$5.22
Grand total.....		\$9.37	\$12.79	\$13.79	\$18.15	\$14.14	\$13.68	\$14.46	\$18.67	\$20.33	\$21.92	\$21.98

* December only.

XII—COST OF A MINIMUM FOOD SUPPLY FOR A REPRESENTATIVE CITY FAMILY.

Inspector Graef, of the Department of Health, New York City, in October 19, 1917, made a careful comparison of the costs of the various elements in a standard dietary in the largest cities of the United States. He found that the cheapest wholesome dietary for a family of five (man, wife, and three children), cost \$9.67 a week in New York City, \$9.25 in New Orleans, \$9.14 in Boston, \$9.12 in San Francisco, and \$9.89 in Chicago. The average for 24 cities and towns in the United States was \$9.43.

The menus provided at these figures, however, were not especially tempting (see Menu No. 1 below), and a really palatable dietary, it

was estimated, would cost approximately 25 per cent more than the figures just quoted, or \$12.95 a week in New York City, \$12.59 in Chicago, \$12.45 in Boston, \$11.92 in New Orleans, and \$11.46 in San Francisco. The average for 24 cities throughout the United States was \$12.68 a week. The detailed report of Inspector Graef was as follows:

“With a chart of retail prices throughout the United States as basis (see *American Food Journal*, September, 1917), the attached weekly family food budget was calculated for a New York City family as compared with a family living in one of the several other large cities.

“The family—a typical one—consists of a man (at active work similar to that of average city liver), a woman and three children. According to the Atwater Standard they would require:

Man	3500	calories per day
Woman	2500	calories per day
Girl (16 years).....	2500	calories per day
Child (12 years).....	2250	calories per day
Child (8 years).....	1750	calories per day

(5) . . . 22500

2500 average daily requirement

“From 10 to 15 per cent of these calories must be protein or tissue-building foods.

“Menu No. 1, which follows, consists of low cost foods of high nutritious value, selected not only with a view to the requirements of a ration, balanced as far as food values, but also a selection to satisfy the palate. The meat allowed would, in all probability, not be sufficient for the man of the family; where this is true, meat has been allowed for him in shape of ham sandwich, to be taken at midday meal—presumably ‘carried to work.’

“Menu No. 2 consists of foods chosen more essentially for attractiveness and with a more liberal allowance of meat.

MENUS—No. 1.

Breakfast	Dinner	Supper
MONDAY		
Oatmeal Rye Bread Oleo, Milk	Bean Loaf Steamed Rice Apple Tapioca Milk	Prune Sauce Corn Dodger Cocoa, Milk Tea
TUESDAY (Wheatless and Meatless Day)		
Cornmeal Rye Bread, Milk Oleo, Sugar, Coffee	Brazilian Bean Soup Beet Tops Rye Bread, Oleo Prunes, Milk	Junket Caramel Sauce Rye Bread Tea
WEDNESDAY		
Oatmeal and Prunes Muffins Milk, Oleo, Coffee	Rice with Cheese Peanut Butter Bread, Oleo Dried Peaches	Pea Soup Corn Bread Oleo, Apple Sauce Milk
THURSDAY		
Hominy, Coffee Corn Bread, Oleo Milk	Macaroni and Cheese Apple Sauce Gingerbread Milk	Cream of Tomato Soup Bread Oat Wafers Prune Sauce
FRIDAY		
Cornmeal Mush Syrup for adults Milk for children Toast and Oleo Coffee	Hashed Cod Oatmeal Wafers Milk, Bananas	Lima Beans, Scalloped Graham Bread Peaches Milk
SATURDAY		
Hominy	Baked Peas and Pork Cornbread and Rice (steamed with milk) Apple Sauce Milk	Cream Toast, Cheese Stewed Prunes Milk for children
SUNDAY		
Oatmeal	Baked Corn and Beans and Cheese Rice Pudding with Prunes	Baked Bananas Cornmeal Muffins Oleo, Milk

WEEK'S MARKET LIST FOR MENUS NO. 1.

Prices in Certain Cities

Kind of food	New York City	Average of 24 cities throughout U. S.	Boston	Chicago	New Orleans	San Francisco
Canned foods	\$0.361	\$0.331	\$0.340	\$0.350	\$0.350	\$0.370
Cereals.....	2.993	3.032	2.109	3.289	2.985	2.036
Dried fruits .....	.999	.949	.930	.894	.905	.853
Fruits .....	.195	.195	.195	.195	.195	.195
Sugar and Syrup .....	.389	.422	.391	.409	.393	.428
Fats.....	.606	.610	.600	.640	.580	.700
Dairy Products.....	2.392	2.011	2.878	2.347	2.134	2.048
Vegetables.....	.709	.739	.769	.760	.685	.674
Meats and fish.....	.937	.901	.850	.917	.939	.810
Condiments .....	.90	.90	.90	.90	.90	.90
	\$9.672	\$9.430	\$9.148	\$9.891	\$9.256	\$9.129

MENUS—No. 2.

Breakfast	Dinner	Supper
	MONDAY	
Rolled Oats Apple Sauce Codfish Balls Coffee, Bread, Oleo	Meat Balls Rice, Boiled Onions White Sauce Bread, Oleo Apple Betty	Prune Sauce Gingerbread Tea, Oleo
	TUESDAY (Wheatless and Meatless Day)	
Hominy Scrambled Eggs Coffee, Bread, Oleo (rye)	Scotch Barley Soup Cheese Fondue Beet Tops Rye Bread, Oleo Rice Pudding	Peaches Oatmeal Macaroons Cocoa
	WEDNESDAY	
Shredded Wheat Scrambled Eggs Coffee, Bread, Oleo	Planked Steak Onions Bread, Oleo Apple Tapioca	Apple Sauce Cookies Bread Tea, Oleo
	THURSDAY	
Rice, Prune Sauce Cream Toast Coffee, Bread, Oleo	Stewed Beans Tomato Sauce Cornbread, Oleo Apple Cake Cornstarch Sauce	Prune Loaf Milk Tea, Bread Oleo
	FRIDAY	
Rolled Oats Codfish Balls Coffee, Bread, Oleo	Baked Fish Lettuce French Dressing Prune Jelly	Fried Hominy Syrup Peach Sauce Tea, Bread Oleo
	SATURDAY	
Cornmeal, Apple Sauce French Sauce Coffee, Bread, Oleo	Bean Loaf Tomato Sauce Scalloped Potatoes Peach Pie Bread, Oleo	Junket Oatmeal Macaroons Tea, Bread, Oleo
	SUNDAY	
Hominy Boiled Eggs Coffee, Bread, Oleo	Roast Leg Lamb Beet Tops Potatoes Chocolate Pudding Bread, Oleo	Cornmeal Souffle Bread, Oleo Cocoa

WEEK'S MARKET LIST FOR MENUS NO. 2.

Kind of food	New York City	Average of 24 cities throughout U. S.	Boston	Chicago	New Orleans	San Francisco
Canned goods.....	\$0.185	\$0.177	\$0.180	\$0.200	\$0.200	\$0.150
Cereals	2.943	3.144	2.202	3.153	3.022	2.902
Dried fruits .....	.690	.650	.670	.626	.645	.605
Sugar and Syrups.....	.515	.570	.515	.537	.540	.581
Dairy products.....	3.340	3.343	3.925	3.165	2.801	2.950
Vegetables.....	.665	.673	.765	.685	.660	.582
Meats and fish.....	3.229	2.717	2.834	2.834	2.409	2.284
Condiments.....	.110	.110	.110	.110	.110	.110
Total cost of food budget....	\$12.953	\$12.685	\$12.451	\$12.593	\$11.929	\$11.460

XIII—REPORT ON THE INCREASED COST OF LIVING FOR AN UNSKILLED LABORER'S FAMILY IN NEW YORK CITY.

(Prepared by the Bureau of Personal Service of the Board of Estimate and Apportionment, New York City, February, 1917.)

INTRODUCTORY STATEMENT.

In February, 1915, the Bureau of Personal Service, in conjunction with the Bureau of Municipal Research, made a study of the cost of living for an unskilled laborer's family. After a careful consideration of the average size of families among laborers in general, in the United States, in the City of New York, and among the rank and file of the Department of Street Cleaning in particular, it was decided to select for purposes of study a family consisting of five members, a wage-earner, his wife, and three children of school age, who could not be expected to contribute anything to the family support. It was decided to fix the sex and ages of the children as follows:

Boy	13 years
Girl	10 years
Boy	6 years

The conclusion drawn from the report was that with less than \$840 a year an unskilled laborer's family of five persons could not maintain a standard of living consistent with American ideas. As a practical application of this conclusion, the Bureau of Personal Service recommended no maximum rate for the rank and file of the Department of Street Cleaning and for other comparable employments below \$840. A study made one year later showed that this amount must be increased to \$980 in order to meet increases in living costs.

CLASSIFICATION OF OBJECTS OF EXPENDITURE.

The following table shows a comparison of the results of studies made in February, 1915, and February, 1917, of the cost of living for an unskilled laborer's family in New York City. The increase in cost in those two years seems to be approximately 16 per cent.

Objects of expenditure have been classified in eight standard groups, for each of which the total annual expense in the years 1915 and 1917 is as follows:

	1915	1917
I.—Housing.....	\$168.00	\$168.00
II.—Car fare.....	30.30	30.30
III.—Food.....	383.812	492.388
IV.—Clothing.....	104.20	127.10
V.—Fuel and Light.....	42.75	46.75
VI.—Health.....	20.00	20.00
VII.—Insurance.....	22.88	22.88
VIII.—Sundries.....	73.00	73.00
Total per year.....	\$844.942	\$980.418
Sundries classified—		
Papers and other reading matter.....		\$ 5.00
Recreation.....		40.00
Furniture, utensils, fixtures, moving expenses, etc.....		18.00
Church dues.....		5.00
Incidentals—Soap, washing material, stamps, etc.....		5.00
Total.....		\$ 73.00

I—Housing:

A family consisting of five people needs at least four rooms to meet the demands of decency. Three rooms for more than four persons causes over-crowding. Four rooms, on the other hand, for five persons is slightly above the accepted standard of "one and one-half persons to a room."

Rent in tenement districts at the present time, as in 1915, according to the statement of reliable real estate men, averages \$4.00 per room per month. This statement is verified by the family budgets exhibited in Appendix B and by the data on present rentals in Appendix A.¹

The housing minimum arrived at in our standard classification represents, therefore, the rent expenditure necessary for an average of 3½ rooms at the \$4.00 monthly rate, or for four rooms at a \$3.50 monthly rate. The resulting annual expenditure for housing, \$168, is 20 per cent of the total 1915 expenditure, which is generally considered a proper ratio of housing to total income.

It is stated by representatives of Horace S. Ely & Co., real estate agents, that the decrease in immigration and increase in emigration, due to the war, have caused many vacancies in tenement houses in the upper and lower east side, with the result that both minimum and maximum rental values in certain quarters have been reduced about \$1. The present generally prevailing tendency to higher prices largely counteracts this reduction, however, so that it may be said that in general rents are the same in 1917 as in 1915.

II—Car Fare:

The minimum estimate for car fare remains unchanged at \$30.30, which represents only 10 c per day for 303 working days.

III—Food:

In arriving at a proper minimum for food expenditure, a number of factors must be taken into consideration. A laborer, in order to perform efficient work, requires nourishing and wholesome food in considerable quantities. The age of children is an all important factor in

¹Appendices not reproduced.

determining their food consumption. The prices of foodstuffs are constantly changing.

The schedule adopted by the United States Department of Agriculture (Farmers' Bulletin No. 142) apportioned the food requirements of women and children of various ages on the basis of fractions of the integer required to support a mature working man. This schedule is as follows:

Man.....	1.
Woman.....	.8
Boy—16 years.....	.9
12 to 16 years.....	.8
10 to 12 years.....	.6
Girl—15 to 16 years.....	.8
14 to 15 years.....	.7
10 to 14 years.....	.6
Child—6 to 9 years.....	.5
2 to 5 years.....	.4
Under 2 years.....	.3

According to the above table the family which we have assumed, consisting of a man, wife, boy of 13 years, a girl of 10 years, and a boy of 6 years, would consume a quantity of food sufficient for 3.7 men.

In 1907, Federal government dietitians agreed that families spending at the rate of 22 c per man per day were not receiving food enough to maintain physical efficiency. Moreover, this minimum was predicated upon extraordinary intelligence, in that it assumed that the mother possessed a scientific knowledge of household economy, food values, and market conditions. The food prices in 1913, as compared with 1907, had risen 16 per cent, according to a report of the United States Department of Labor (Retail Prices and Cost of Living, Series 8). Taking the 22 c per man per day minimum established in 1907 and allowing a 16 per cent increase, 25½ c would be the minimum measured by 1913 standards. Adding to this a 1½ c marginal limit, to provide for discrepancies and for an increase in prices in 1914, 27 c per man per day was arrived at as a fair minimum for 1915. This was the minimum established at that time by the Association for Improving the Condition of the Poor as the basis of their relief work and was used as a basis for calculation in the 1915 Report of this Bureau. At the present time the Association for Improving the Condition of the Poor is using 30 c as its minimum because of the increased cost of food. Upon these two bases the cost of food per day for one family in New York City would be:

	1915 Per day.	1917 Per day.
Husband.....	\$.27	\$.30
Wife.....	.216	.24
Boy, 13 years.....	.216	.24
Girl, 10 years.....	.162	.18
Child, 6 years.....	.135	.15
Total per day.....	\$.999	\$1.11
Total per week.....	\$7.00	\$7.77

* Report on Nutrition Investigation. Special Committee on Standards of Living.

This conclusion is based upon scientific facts regarding the number of calories of heat and grams of protein necessary for the human body. It is only one and by no means the most trustworthy of several logical methods of reaching a minimum estimate.

Another and more trustworthy method of approach to such a conclusion is to price a list of foodstuffs necessary for an American family of five. Following this method, an itemized food budget was taken from Dr. Chapin's book on "Standard of Living in New York City," and was submitted for criticism to dietitians and social service workers, with the result that the list was slightly modified. In order to find the prevailing cost of the modified list in New York City, foodstuffs were priced in the places where unskilled laborers would naturally buy; that is, municipal markets, push-carts, co-operative stores and regular neighborhood grocery and butcher establishments. (For this food budget used in field work, with prices for 1915 and 1917, see Appendix A.¹) This method of approach led to the conclusion that \$7.381 per week, or \$383.12 per year, would be the minimum requirement for 1915.

In securing facts as to the increased cost of food for 1917, this same list of foodstuffs was again priced at markets, push-carts, and stores of the same type as before and the average amount of increase ascertained. From this investigation it was learned that the cost of exactly the same foods is at the present time \$9.469 per week, or \$492.388 per year, showing an increase of \$2.088 per week, or \$108.576 per year, over the cost for 1915. It may be noted that it is possible to sustain life on a less varied and less expensive diet than that considered in this report, but, as stated before, this study is based upon the standards of living consistent with American ideas.

IV—Clothing:

The clothing estimate was made in the same way as that for food. A list of the clothing needed by a family of five was taken from Dr. Chapin's report and considerably modified. The prices of the various articles in this clothing budget were obtained from the type of stores at which workingmen would naturally buy. (For copy of this list of clothing, with prices for 1915 and 1917, see Appendix A.¹)

It is difficult to make exact statements about the expenditure for such an item as clothing, in which there are so many personal considerations. Basing our estimate, however, upon average common-sense requirements and upon prices prevailing in 1915 for these requirements, we concluded that \$104.20 for our assumed family of five was the exact clothing cost for that year. Prices for this clothing list were again obtained in February, 1917, in the same way in which food prices were checked, and were found to total \$127.10 as against \$104.20 in 1915.

¹Appendix not reproduced.

V—Fuel and Light:

The fuel and light estimate of \$42 for 1915 was based on facts submitted by the Consolidated Gas Company and by public and private relief organizations, and on past studies, taking into consideration, however, the prevailing prices of coal, wood, and gas. (For supplementary data see Appendix A.) All of the estimates submitted were in the neighborhood of \$40 to \$45.

Our conclusion for 1915 was a fair mean and allowed for the following approximate consumption of fuel and gas:

Fuel—

During the winter months, 3 bags of coal per week at 25c a bag, and 6 bundles of wood per week at 2c per bundle, resulting in a weekly expenditure of 87c. During the fall months, 2 bags of coal per week at 25c per bag, and 4 bundles of wood per week at 2c a bundle, resulting in a weekly expenditure of 58c. Assuming 18 weeks for the winter and 13 weeks for the fall, the total expenditure for fuel amounted to \$23.20 for 1915.

Light and Gas Used for Fuel—

Light, assuming the use of gas during the 18 weeks of the winter, at 25c per week, 13 weeks of the fall at 35c per week, and 21 weeks of the summer at 50c per week, amounts to a total expenditure of \$19.55. During the fall and summer gas is used for cooking. Thus the consumption is increased.

The estimate for 1917 is changed only by an increase in the cost of coal from 25c to 30c a bag. This rise causes an increase in the total yearly expenditure for fuel to \$27.20 as against \$23.20 in 1915.

VI—Health:

The problem of arriving at a minimum for health expenditure is necessarily involved. Several studies have been made upon this subject which for our purposes are quite satisfactory. The Metropolitan Life Insurance Company, in connection with its welfare work, has considered health expenditure in more detail than has any other organization. Dr. Lewis I. Dublin, their statistician, who has studied this problem from an insurance standpoint, concludes that a workingman will average five weeks' illness once in every three years, or that one out of every three workingmen will be sick in each year. A prominent benevolent society, organized in St. Louis for the special purpose of establishing health insurance, has arrived at the conclusion that an adult requires 50 cents and a child 25 cents a month for health expenditure. This totals \$21 a year for our family of five persons. Prof. Irving Fisher, of Yale, who has devoted considerable study to health insurance, states that the

average expenditure resulting from illness and death in workingmen's budgets is \$27 per annum. This amount is agreed to by the United States Commissioner of Labor (1912) and by Dr. Dublin, although Dr. Dublin supplements this by stating that even at this rate the family will to some extent be dependent upon charity.

Our conclusion of \$20 is based upon the fact that there are more facilities for conserving the health of a family in New York City than elsewhere and that \$27 under these conditions would be too high. We realize, however, that it is impossible to establish beyond criticism a definite amount for health expenditure. This amount, first established in 1915, remains unchanged for 1917.

VII—Insurance:

Insurance is found to be an almost universal item in budgets of workingmen's families. The expenditures of \$22.88 in our minimum estimate is based upon the assumption that the head of the family should be insured for \$500, the wife for \$100, and that the children should each have the smallest amount of insurance which can be obtained. This is merely industrial insurance and does not provide for sickness, accident, or property loss. * * * * *

In industrial insurance weekly payments are the rule. For a \$500 policy the premium is 25c a week, for a \$100 policy 10c a week, while a minimum of 3c is required for the policies of \$22.88 for the family. Our estimate is based on the rates offered for those policies considered most satisfactory by the three insurance companies which specialize in industrial insurance. This amount remains the same in 1917 as in 1915.

VIII—Sundries:

The item "Sundries" includes recreation, reading, general household expense, church contributions, etc. It is unnecessary to defend the fact that a family in order to maintain a normally happy and self-respecting existence must have proper amusements. For recreation, therefore, we have allowed occasional trips to the beach, incidental car fare, moving picture shows, Christmas and birthday presents, and miscellaneous amusements. For furniture, utensils, fixtures, moving expenses and general maintenance, \$18 is allowed, although this amount could be legitimately increased. \$5 is allowed for church contributions. Incidentals, including soap, washing material, stamps, umbrellas, and other miscellaneous items, are totaled at \$5. For reading a one-cent daily paper is allowed, with a Sunday paper almost every week. The resulting \$73 expenditure for Sundries is a fair minimum. This amount, fixed originally in 1915, is allowed to remain unchanged for 1917, although some slight increase could legitimately be made.

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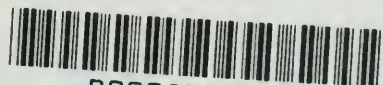
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